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REMARKS

The Examiner's Office Action mailed March 10, 2004, has been received and its contents carefully reviewed. Claims 12-20 remain pending in the present application. In response to the Office Action, Applicants amended claim 20 to correct an informality and further distinguished the features of the present invention from the cited references. For these reasons, and the reasons set forth in detail below, presently pending claims 12-20 are believed to be in condition for allowance. Reconsideration of this application is respectfully requested.

Claim Rejections under 35 U.S.C. § 103(a)

Claims 12-20 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over the combination of Lokoff et al. in U.S. Patent No. 5,060,219 (hereafter "the '219 patent") in view of Timmermans et al. in U.S. Patent No. 5,930,210 (hereafter "the '210 patent"). Applicants respectfully submit that the claimed invention defines subject matter that is patentably distinct over the combination of references. For the reasons set forth in detail below, it is respectfully requested that the rejection of these claims should be reconsidered and withdrawn.

Claim 12 recites a disk-shaped recording medium comprising a primary recording region and a secondary recording region, which is located on the side of an internal periphery of the primary recording region. The primary recording region has a track which wobbles at a first pitch along which a user is able to record a data signal. The secondary recording region has a track which wobbles at a second pitch different from the first pitch or does not wobble, and along which information pits are formed to record a signal representative of control information. The control information in the secondary recording region includes, as data, an invalid key information item for inhibiting reproduction of main data encrypted in the primary recording region.

In contrast, the '219 reference discusses a recording carrier that is preconditioned with a control information pattern that includes identification of one or more types of information for which recording is permitted (see col. 1, lines 56-58). With regard to claim 12, the Examiner asserts that the '219 patent discloses a secondary recording region "along which information pits are formed to record a signal representative of control information"

and "the control information in the secondary recording region includes, as data, an invalid key information item for inhibiting reproduction of main data encrypted in the primary recording region" as recited in claim 12 of the present application. The Examiner cites column 1, lines 40-55 and column 2, lines 50-58 to support this assertion. However, the cited sections of the '219 patent fail to disclose the invalid key information item for inhibiting production. Instead, the '219 patent states that, "It is an object of the invention to provide an information recording system as described above, which prohibits the large-scale evasion of copyrights. According to the invention this object is achieved by means of a recording system wherein the record carrier is preconditioned with a control-information pattern indicating for which type(s) of information such record carrier is intended the recording apparatus comprises means for reading control information represented by the control-information pattern, test means detecting the type of information received applied, and control means for controlling the recording process in such a way that the received information is recorded only if it is detected to be of a type indicated by the control information being read from the record carrier." Please see column 1, lines 40-55.

The remaining section cited from the '219 patent also fails to disclose this limitation, instead stating at column 2, lines 50-58, "An embodiment of the system is characterized in that the record carrier is of an erasable type, but the preconditioning control-information pattern is non erasable. Because the control information cannot be erased it is then virtually impossible to alter the record carrier utilization. If a record carrier with a preformed or prerecorded servo track is used it is advantageous to record the control-information pattern in such servo track. In that case the control information can be read by means of the apparatus already available for reading the information in the servo track." The Examiner offers no additional explanation to equate the cited portion of the '219 patent to the claimed limitation. Applicant respectfully requests that such further explanation be provided in the next response.

The present invention inhibits the reproduction of the encrypted main data that has been illegally copied by employing a secondary recording region has a track that wobbles at a second pitch different from the first pitch or does not wobble. Information pits formed along the track of the secondary recording region record a signal representative of control information which includes an invalid key information item. As a result, the reproduction of the encrypted main data can be controlled by the key information recorded in the internal

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periphery to prevent illegal copying of the encrypted main data recorded in the primary recording region.

The Examiner points to the '210 patent stating that the use of an invalid key information item is well known in the art. However, the section of the '210 patent cited to support this assertion does not include such a disclosure. The '210 patent discusses, "The input of the filter 80 is coupled to the circuit 56 so as to receive the tracking error signal RE. The output of the filter 80 is supplied to a demodulation circuit 81 for recovering the code represented by the modulated wobble. The code recovered by the demodulation circuit 81 is supplied to a comparator circuit 82 for comparing the code recovered with a predetermined code. The comparator circuit 82 is of a type that generates an enabling signal for the recovery circuit 61 in the event that the code recovered by the demodulation circuit 81 corresponds with the said predetermined code. The information recovery circuit 61 may be of an usual type which may be enabled by means of an enabling signal. It may be preferably to record encrypted or scrambled information on the record carrier which can only be recovered using a predetermined encryption or descrambling key code." Please see column 7, lines 1-16.

Applicants respectfully submit that the cited portion of the '210 patent discusses only that a de-encryption code may be programmed or recorded within the information recovery circuit. Such a de-encryption code is not the same as the claimed "invalid key information item" which inhibits reproduction as recited in claim 12 of the present invention.

Neither of the cited references teach or suggest that the recited second recorded region has a track "along which information pits are formed to record a signal representative of control information" nor do the cited references disclose "an invalid key information item for inhibiting reproduction of main data encrypted in said recording region" as required by claim 12.

The combination of references fails to teach or suggest a motivation for one of ordinary skill in the art to utilize an invalid key information item for inhibiting reproduction of the main data. No suggestion or rationale, absent Applicant's teachings, for deviating from the encryption-decryption scheme is evident. For the reasons outlined above, the combination of the '219 and the '210 patent fails to establish a prima facie case of obviousness under 35 U.S.C. § 103. As such, Applicant respectfully submits that claim 12 is allowable over the cited references and requests that the rejection of claim 12 under 35 U.S.C. § 103(a) be withdrawn.

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Likewise, claims 13, 14, and 20 are dependent apparatus claims directed to the recording medium of independent claim 12 and add additional features to base claim 12. Therefore, Applicants respectfully request that the rejection of claims 13, 14, and 20 under 35 U.S.C. §103(a) also be withdrawn for the reasons set forth above with regard to independent claim 12.

Claim 15 recites a reproducing apparatus for the reproduction of main data recorded in the primary recording region of the recording medium of claim 12, where the reproducing apparatus includes a pickup for reading a signal from the recording medium under rotation. The apparatus also includes means for shifting the pickup and means for distinguishing if a reproduction location of the recording medium is the track which wobbles at the first pitch or the track that wobbles at the second pitch, where the second pitch is different from the first pitch or does not wobble. Additionally, where the reproduction location is the primary recording region having the track which wobbles at the first pitch, and the main data encrypted in the primary recording region are being recorded, the pickup is shifted to the secondary recording region by the means for shifting the pickup. Therefore, the reproduction of the main data encrypted in the primary recording region is inhibited by the invalid key information item included in the control information in the secondary recording region.

Conversely, the '210 patent discusses an embodiment of a record carrier where tracks are divided into two groups, each having a different pitch. The tracks are scanned by a radiation beam and the presence of the variations in the track pitch are detected. Please see col. 5, lines 13-25. However, the '210 patent fails to disclose "... in a case where according to said means for distinguishing the reproduction location of said recording medium, the reproduction location is said primary recording region having said track which wobbles at said first pitch, and the main data encrypted in said primary recording region are being recorded, said pickup is shifted to said secondary recording region by said means for shifting said pickup, and the reproduction of the main data encrypted in said primary recording region is inhibited by the invalid key information item included in said control information in said secondary recording region," as required by claim 15.

The Examiner asserts that the combination of the '210 patent and the '219 patent discloses all the limitations of claim 15, and refers to column 5, line 53 to column 6, lines 1-56 of the '210 patent as support. However, this cited section of the '210 patent merely discusses a tracking error signal to maintain the beam substantially in the center of the track and velocity control means for maintaining the scanning velocity substantially constant, and

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does not teach or suggest means for shifting the pickup to the secondary recording region nor inhibiting the reproduction of the main data encrypted in the primary recording region by the invalid key information item as required by claim 15.

Further, the '219 patent fails to cure the deficiency of the '210 patent. The cited portions of the '219 patent relates to a recording device that prevents the illegal recording of music data in a PC recording media by presetting the function for music data recording or computer data recording. The '219 patent neither teaches or suggests the above-mentioned functional limitations nor does suggest modifying any apparatus to include such a feature.

The combination of references fails to teach or suggest a motivation for one of ordinary skill in the art to utilize, in a case where according to said means for distinguishing the reproduction location of said recording medium, the reproduction location is the primary recording region having the track which wobbles at the first pitch, and the main data encrypted in the primary recording region are being recorded, the pickup is shifted to the secondary recording region by the means for shifting the pickup, and the reproduction of the main data encrypted in the primary recording region is inhibited by the invalid key information item included in the control information in the secondary recording region, as required by claim 15. No suggestion or rationale, absent Applicant's teachings, for deviating from the encryption-decryption scheme is evident. For the reasons outlined above, the combination of the '219 and the '210 patent fails to establish a prima facie case of obviousness under 35 U.S.C. § 103. As such, Applicant respectfully submits that claim 15 is allowable over the cited references and requests that the rejection of claim 15 under 35 U.S.C. § 103(a) be withdrawn.

Likewise, claims 16-19 are dependent reproducing apparatus claims of independent claim 15 and add additional features to base claim 15. Therefore, Applicants respectfully request that the rejection of claims 16-19 under 35 U.S.C. § 103(a) also be withdrawn for the reasons set forth above with regard to independent claim 15.


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CONCLUSION

Therefore, in view of the foregoing Amendment to claim 20 and the above remarks, Applicants respectfully request that the rejections of record be reconsidered and be withdrawn by the Examiner. It is further requested that claims 12-20, thus be allowed and that the application be passed to issue.

Should the Examiner believe a conference would be of benefit in expediting the prosecution of the present application, he is hereby invited to telephone counsel to arrange such a conference.

Respectfully submitted,


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